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REMARKS

Claims 1-5 and Claim 8 are cancelled herein. Claims 6 and 7 had previously been

cancelled. New Claims 9-22 are added herein. Support for the new claims can be found

throughout the specification, for example, pages 21-23 and pages 13-15. No new matter has

been added.

The Examiner has objected to the specification for referencing the parent application,

which since has issued as a U.S. patent. The cross-reference has been amended to now claim

priority to U.S. Patent No. 6,743,499.

The Examiner has also provisionally rejected Claims 1 and 4 on the ground of non-

statutory obviousness-type double patenting over Claims 1, 2 and 4-7 of copending

Application No. 11/739,575. Since this is a provisional rejection, when the above-referenced

application or the '575 application issues, Applicants will file a terminal disclaimer in the

later pending application. See MPEP § 804B.1.

Claims 1-5 and 8 stand rejected under 35 U.S.C. §112, second paragraph as being

indefinite for failing to particularly point out and distinctly claim the subject matter of the

invention. More specifically, the word "fine" is objected to in Claim 1. The Examiner

further states that the phrase "said outer surface" lacks antecedent basis in Claim 3.

As stated above, Claims 1 and 3 have been cancelled. The newly pending claims no

longer include the wording objected to.

Claims 1 and 4 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S.

Patent No. 3,628,999 issued to Schneble, Jr. In addition, Claims 2, 3, 5 and 8 stand rejected

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under 35 U.S.C. §102(a) as being obvious over Schneble Jr. as applied to Claims 1 and 4 in

further view of U.S. Patent No. 3,755,890 issued to Klehm, Jr.

Applicants respectfully submit that Schneble, Jr. does not disclose all of the elements

as set forth in new Claims 9-22. In addition, the newly pending claims are not obvious in

view of the cited references in that the limitations of the pending claims are not disclosed and

would not be obvious to one skilled in the art.

More specifically, the newly pending claims include the limitation that the opposite

surface side of the work piece is closed before the metal filling operation and opened after the

metal filling operation. In addition, the metal layer is formed on at least an inner peripheral

surface portion of the through hole adjacent to the first surface of the work piece.

The present invention provides various advantages over conventional methods. These

include increased wettability and the ability to fill the molten metal in the hole.

Applicants submit that the application is now in proper form for allowance, which

action is earnestly solicited. If resolution of any remaining issue is required prior to

allowance of the application, it is respectfully requested that the Examiner contact

Applicants' attorney at the telephone number provided below.

Respectfully submitted,

/james f. harrington/

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